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Backgrounder

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The Economics of Job-Creation Programs: What We Know

Ben Cherniavsky

The controversy surrounding the job-grant programs administered until recently by Human Resources Development Canada (HRDC) has mainly focused so far on accountability and the potential for politically influenced grants. While these issues are undeniably important, a clear assessment of the justification for subsidizing job creation in the first place has been notably absent from the debate.

On the surface, such analysis might seem unnecessary. Defenders of the grants like to point out that, although HDRC could have improved the management of the system, the programs created countless worthwhile jobs across the country.

This argument is, however, a gross oversimplification. For one thing, it ignores the enormous opportunity costs associated with government-funded employment programs. After all, the money funneled from Ottawa into the hands of program administrators and job-grant recipients could have been used for programs such as health care, homeless shelters, and education.

More fundamentally, basic economic principles tell us that the income, payroll, and consumption taxes levied to pay for job programs tend to distort the labor market. Specifically, they affect the relationship between the supply of and demand for labor by creating a "wedge" between the price employers must pay to hire someone and the purchasing power employees take home. This wedge represents a drain on the economy.

Incurring such costs to fund socially desirable or necessary public goods, such as education or national defense, may be justifiable in terms of their net benefits. When it come to creating more jobs, however, the most efficient way to do so is simply to decrease the tax wedge. Cutting taxes on labor would allow the labor market, not central planners in Ottawa, to determine where and what jobs are created.

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To counter this point, defenders of HRDC's programs argue that the social benefits of intervening in the labor market to help the most disadvantaged regions and workers find jobs outweigh the costs of the grants. But just what are the costs and benefits of job-creation programs? Evidence from past employment-stimulation programs suggests that such programs are generally inefficient and ineffective. They are also much more expensive than they appear to be on the surface once all costs — that is, the direct costs of the subsidy, the administrative costs of the program, *and* the opportunity costs of the funding — are taken into account. If Ottawa insists on playing a role in the labor market, it should use the tax system rather than trying to determine who most deserves a grant. Tax-assisted programs, since they are generally available and less subject to political intervention, can produce more and better jobs at less cost.

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Measuring what society gains — either economically or altruistically — from government-funded job creation, particularly for disadvantaged workers or regions, remains a rather subjective exercise. Nevertheless, there are compelling reasons to believe that the benefits are often much less than defenders of intervention claim, because an accurate measurement of any job program's benefits needs to count *net new jobs* created, not simply total jobs associated with the program.

To illustrate this point, one can distinguish among the direct effects, indirect effects, and deadweight losses of a subsidy on employment. These criteria can be summarized as follows:

- *Direct effects.* The number of jobs that a particular tax policy subsidizes in a specific industry — say, a hundred new jobs in the hotel industry — for a targeted group of workers, or in the economy at large is that policy's direct effect. Defenders of HRDC programs tend to focus exclusively on such direct effects.
- *Indirect effects.* Any fiscal initiative costs money. Accordingly, if a new policy were to involve no increase in borrowing or decrease in a budgetary surplus, it would probably require an increase in some tax, which would raise the tax wedge in another industry. If the subsidy to hotels that created the hundred new jobs in the example above were funded by higher taxes on gasoline, the indirect effect would be to increase the tax wedge between buyers and sellers of fuel. The result might then be reduced demand and profits in the energy sector, which could lead to falling production and lost jobs in that sector. Simply put, one indirect effect of any job-creation policy could be a decrease in employment elsewhere in the economy. Another indirect effect could be the replacement of existing employees with new, subsidized workers: each subsidized worker the hotels hire would replace another the hotels have fired. Again, job elimination would offset job creation. Accordingly, to measure the net benefit of any job-creation policy, one must take the total number of jobs that were created directly (the direct effect) and subtract the number of jobs that were lost because of the policy

(the indirect effect) or that would have been created even in the absence of the policy. The result is the *net employment effect* of the tax program.

- *Deadweight losses.* Subsidies or tax incentives to create jobs can put people to work who were previously unemployed or who would otherwise have moved to another region to find employment. If the hired worker had been unemployed, the value of his or her time spent on household chores and leisure might have been, say, $5 per hour. If the job-creation program provided a subsidy of $2 per hour and the worker were paid $10 per hour, the economic value of the job would be $8 per hour — a net economic gain of $3 per hour over the worker's being unemployed. If, on the other hand, the worker were to move elsewhere and into a job paying $9 per hour, the firm that lost the worker would lose an opportunity to create value and the displacement would cost society $1 per hour. In other words, when the gain from hiring the unemployed is outweighed by the loss from shifting workers out of more productive jobs, the economy as a whole suffers a deadweight loss. (Moreover, to the extent that the shift of workers from more productive jobs reduced taxes that profitable firms paid, deadweight losses would increase.)

Measuring the Total Costs and Net Benefits of Employment Subsidies

Although the total costs and net benefits of employment subsidies are not easy to measure, a number of studies have assessed the real economic impact of publicly financed employment programs. (The studies I discuss in this *Backgrounder* were selected from a more comprehensive review of government-funded job programs that I prepared for the Technical Committee on Business Taxation — see Cherniavsky [1996].) These programs typically were less subject to political intervention than was the controversial Canada Jobs Fund, but if even well-designed programs struggle to pass cost-benefit tests, it is reasonable to conclude that poorly designed programs will seldom, if ever, do so. In general, the evidence suggests that direct labor market intervention can create some new jobs, but that the required stimulants are costly relative to the net benefits.

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The Employment Tax Credit Program

In the late 1980s, a study by the Economic Council of Canada (Gera 1988) examined the effectiveness of the federal government's Employment Tax Credit Program (ETCP), which ran from 1978 to 1981. This program was specifically designed to stimulate private sector employment by granting to any "eligible employer" tax credits of between $1.50 and $2.00 per hour for each "eligible employee" hired above the firm's normal workforce. The ETCP was designed to favor unskilled people who had suffered long-term displacement from the workforce, thus both providing employment and, it

was hoped, increasing the long-term employability of the participants beyond the period for which they were subsidized. At the time it was introduced, Ottawa estimated the program would produce 50,000 jobs a year.

The Economic Council concluded that the ETCP's ability to stimulate *new* jobs was marginal at best. In theory, an employer could not qualify for a subsidy without proof that the new job represented an incremental increase in the firm's employment. The possibility remained, however, that the worker would either have found unsubsidized employment somewhere else or have been hired by the firm even without the subsidy. After accounting for this deadweight loss and other program costs in a statistical model, the report estimated that the cost *per new job* was $9,555 in 1988 dollars. These results confirmed an earlier Canada Employment and Immigration Commission (Canada 1982) estimate of the ETCP's incremental effect on employment, which found that the program's maximum degree of incrementality was 37 percent — that is, fully 63 percent of the jobs the ETCP created would have appeared even in the program's absence.

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Finally, the ECC study concluded, the ETCP had no positive impact on either the long-term employability of its participants or their wages within or beyond the period during which they were subsidized. No incentives existed within the ETCP to provide workers with training — indeed, such incentives would have made the program even more costly — and the majority of jobs created paid relatively low wages and required little skill. Moreover, because the program favored those who had experienced long-term displacement from the workforce, it also favored those who were most likely to experience it again, reducing its potential long-run social benefits. This is an inherent weakness of any job-subsidy program targeted on the chronically unemployed, and one shared by HRDC job grants that were directed to areas of high unemployment.

The New Jobs Tax Credit Program

Another study of a government-funded job program (Tannenwald 1982) showed similarly unfavorable results. The author examined the New Jobs Tax Credit (NJTC) program in the United States, introduced in 1977 for a predetermined two-year period. The NJTC tried to stimulate jobs through employment subsidies to private industry. It was a countercyclical measure to combat the high unemployment of the period, so its focus was on short-term marginal improvements in employment rather than promoting the job opportunities of a targeted group.

Tannenwald found some evidence that the NJTC, which offered firms a credit against corporate (or personal) income tax, did increase employment in some sectors of the US economy — according to one estimate, the NJTC was responsible for 20 to 30 percent of the 1.3 million jobs created in the retailing and construction industries in 1977 and 1978. But that assessment counted only *direct effects*. Tannenwald concluded that the NJTC was highly cost ineffective in the sense that the reduction in wages (and government revenues)

resulting from the tax credit was not an effective stimulus for hiring. He estimated that *new* employment increased by only 0.4 percent for every 10 percent reduction in after-tax wages stimulated by the NJTC, which translated into an average tax revenue loss per new job created of between US$14,100 and US$17,100, depending on the assumed displacement rate.

Tannenwald's 309-firm survey suggested that inherent in the NJTC were several impediments that made firms reluctant to respond to the tax incentive. Most notably, more than half the respondents stressed that product demand, not tax credits or subsidies, determined hiring levels; clearly, there was no need for firms to increase output if no one was going to purchase the products. This key point was corroborated by another of Tannenwald's findings: fewer than 10 percent of knowledgeable qualifying respondents reported that their workforce would have been smaller without the NJTC. This finding suggests that, to the extent that HRDC's job-creation funding was allocated by forces unrelated to product demand, we can reasonably expect it to have been equally, if not more, inefficient on a cost/benefit basis.

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The Targeted Tax Credit Program

In 1979, the United States replaced the NJTC with a Targeted Jobs Tax Credit (TJTC) program. Like parts of the HRDC subsidies, the TJTC was designed to enhance the employment opportunities of "disadvantaged workers" — a group that included the disabled, welfare recipients, economically disadvantaged youth, Vietnam War veterans, and ex-offenders.

With its focus on targeted classes of workers, the TJTC had no provisions for ensuring incremental increases in employment. To qualify for the subsidy, a firm simply needed to hire a targeted worker whether or not the position represented a net increase in the firm's payroll. Thus, there was the inherent likelihood that firms would replace existing workers with subsidized ones, creating deadweight losses. According to a 1993 estimate by Bishop and Montgomery, the program created, at most, three new jobs for every ten tax credits granted.

This low level of new job creation obviously increased the program's cost per new job. As noted above, however, the TJTC was not primarily concerned with marginal employment. Instead, the program was regarded as successful even if it encouraged firms to hire targeted workers in lieu of ineligible workers for positions that would have been available regardless of the subsidy.

Even by this less meaningful criterion, the TJTC appears to have produced negligible benefits. Most of the workers who technically qualified and applied for the credit turned out not to be significantly disadvantaged in the workplace. Bishop and Montgomery estimate that seven of every ten tax credits granted under the program represented churning among unskilled labor: very few of the most unemployable were actually assisted. The authors conclude:

> [T]he great majority of claims for tax credits are for workers who would have been hired [at the same business or elsewhere in the economy] even in the

absence of the subsidy. These are simple transfer payments to the employers. (1993; as quoted in Cherniavsky 1996.)

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A corollary to this observation — one applicable to the HRDC program — is that firms may simply not be interested, regardless of incentives, in complying with the red tape required to hire those who truly represent society's least employable. According to a 1982 survey cited in Bishop and Kang (1991), 73 percent of employers familiar with the TJTC said they did not plan to ask for TJTC-eligible referrals when they needed unskilled workers in the future — further confirmation that it is the demand for products and the supply of appropriately skilled labor, not government-sponsored job-creation programs, that ultimately drive up employment. In another study of the TJTC, Bishop and Kang suggest that the program's low take-up rates were due largely to the administrative costs of hiring targeted workers. From the employer's perspective, applying for the subsidy required not only an acquisition of knowledge about the program but also time-consuming research of personal information (such as family-income sources and criminal records) about potential employees who did not carry certified vouchers. Moreover, potential employees who revealed themselves as eligible for the TJTC in hope of saving the firm research costs or simply making it aware of the program risked stigmatization as less productive workers if the employer was not interested in subsidized individuals.

Such risks were confirmed by a survey (reported in ibid.) that asked employers who had heard of the TJTC (but not necessarily applied for it) if they believed targeted workers "make better or poorer employees than people who are not tax-credit eligible." Only 7 percent of respondents said they made better employees, while 28 percent said they made poorer employees (the rest responded with the more socially acceptable "don't know" or "no difference"). Even when firms requested interviews with subsidized workers, time-consuming elements and stigmatization affected their ultimate response to the program.

One can only conclude from these observations that the TJTC was an inefficient program. Indeed, using program data for 1985, Bishop and Montgomery (1993) find that, at best, each new job cost $5,270 per worker; a more pessimistic estimate — but one that the authors feel likelier to be true — was a cost of $11,581 per new job.

Drawing Conclusions about the Present from the Past

No similar study of HRDC's job-creation program has been conducted so far, but these studies of past experience allow one to make a number of observations about it. First, Canadian taxpayers can be quite certain that the HRDC program's cost per new job exceeded the range of observed costs per new job in the tax-based programs because of a fundamental difference: the latter were delivered via the tax system as a *partial* subsidy to employers,

while the former was delivered through grants providing funds for the *entire* cost of each job. Assuming the distortionary effects of job-creation programs hold constant among all forms of subsidies and grants, one can infer that the higher cost of each HRDC-funded job meant that the cost per net *new* job was also likely to be higher.

This key difference leads to a second observation: if government must intervene in the labor market, generally accessible tax-based subsidies are better than direct grants. As Solow concludes,

> [because] profit incentives amongst businesses operate more or less as they are supposed to...wage subsidies have some advantage over direct job creation according to the efficiency criterion. They are probably also to be preferred according to the equity criterion: they offer at least the possibility of a start in the mainstream labor market, whereas direct job creation runs the risk of creating a sort of caste or stigma. (1980; as quoted in Cherniavsky 1996.)

Moreover, tax subsidies have the important advantage of eliminating an incumbent government's ability to use "handout" job funds for political purposes. Had HRDC's funding been allocated indiscriminately through the use of tax credits, as in the examples discussed above, there would have been little debate about the politics of distributing money across regions and among ridings.

HRDC's job-creation program was a far less apt tool for assisting the disadvantaged than broad, tax-based incentives would have been.

Although publicly financed employment programs are generally based on altruism, good intentions do not necessarily produce economic efficiencies. Administrative costs, indirect effects, deadweight losses, stigmatization effects, and lack of demand stimulants associated with past employment subsidies suggest that tax cuts of the same cost would, in fact, have produced better net employment results. Assisting the disadvantaged is a worthy goal, but governments need to choose their tools carefully if they hope to produce meaningful results. HRDC's job-creation program was a far less apt tool for pursuing that goal than broad, tax-based incentives would have been. The debate over accountability and political interference is important. But the inefficacy of grant-based government job-creation programs is the key lesson to be drawn from the HDRC experience.

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